



DEPARTMENT OF THE NAVY

NAVAL AIR STATION OCEANA
1750 TOMCAT BOULEVARD
VIRGINIA BEACH, VIRGINIA 23460-2168

IN REPLY REFER TO:

NASOCEANAINST 3710.17G CH-1
30

26 Feb 03

NAS OCEANA INSTRUCTION 3710.17G CHANGE TRANSMITTAL 1

Subj: NAVAL AIR STATION OCEANA SEARCH AND RESCUE PLAN/STANDARD
OPERATING PROCEDURES

1. Purpose. To issue change one to subject instruction.
2. Action. Change Chapter III, paragraph 303 to read as follows:

"303. Proficiency Requirements. In addition to proficiency requirements found in references (c) and (f), pilots and aircrew should comply with the following:

a. If a pilot has not flown for a period exceeding 15 days, but less than 30 days, he/she should fly at least a 1.0 hour daytime flight, including pattern work, before being scheduled for night flying.

b. If a pilot has not flown for more than 30 days, upon return he/she should first fly a daytime flight with a current HAC.

c. Pilots and aircrew should log a day familiarization flight every 30 days.

d. Pilots and aircrew should log 1.0 hours of nighttime and a night familiarization flight every 30 days.

e. Pilots and aircrew shall meet the minimum SAR training requirements per references (e) and (g).

f. Pilots should fly three night-coupled approaches every 60 days.

g. During rappel short-haul evolutions, non-aeronautically designated personnel shall not be used, unless approved by the SAR or Operations Officer.

h. Pilots should conduct at least one rappel training flight per month.

j. All HIRA qualified crewmen shall maintain their currency per reference (e)."


J. A. LEAVER

Distribution:
NASOCEANAINST 5216.1W
List I (11 and 30 only)



DEPARTMENT OF THE NAVY
NAVAL AIR STATION OCEANA
1750 TOMCAT BOULEVARD
VIRGINIA BEACH, VIRGINIA 23460-2191

IN REPLY REFER TO:
NASOCEANAINST 3710.17G

30
3 SEP 2002


NAS OCEANA INSTRUCTION 3710.17G

Subj: NAVAL AIR STATION OCEANA SEARCH AND RESCUE PLAN/STANDARD
OPERATING PROCEDURES

Ref: (a) Joint Pub 3-50
(b) NWP 3-50.1 (Rev. A)
(c) NAVAIR 01-230HLH-1
(d) NASOCEANAINST 3120.1 (Section 500.60)
(e) OPNAVINST 3130.6C
(f) OPNAVINST 3710.7S
(g) COMNAVAIRLANTINST 3130.6

Encl: (1) Search and Rescue (SAR) Standard Operating Procedures (SOP)

1. Purpose. To issue enclosure (1), which establishes policy governing the operation of Naval Air Station (NAS) Oceana SAR helicopters per references (a) through (g).
2. Cancellation. NASOCEANAINST 3710.17F. Due to numerous changes, paragraph markings have been omitted.
3. Discussion. These operating procedures apply to NAS Oceana helicopter flight crews and support personnel. Nothing is intended to supersede existing directives of higher authority, but may provide more stringent rules or procedures in the absence of other specific guidance.
4. Action
 - a. All flight crews shall adhere to SOP, except where safety of flight, extremis, Commanding Officer's approval or good judgement dictates a deviation.
 - b. All flight crews, support personnel and Air Operations Duty Officers (AODOs) shall familiarize themselves with this instruction.
 - c. The H-3 Naval Aviation Training and Operating Procedures and Standardization (NATOPS) Officer is charged with the administration of the SOP program. All proposed changes to SOP shall be submitted to the H-3 NATOPS Officer.
 - d. All pilot, aircrew and aircraft copies of the H-3 NATOPS manual shall contain a copy of this SOP.


C. A. SILVERS

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SEARCH AND RESCUE (SAR) STANDARD OPERATING PROCEDURES (SOP)

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Enclosure (1)

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CHAPTER I

SAR DUTY PROCEDURES

100. Command Responsibilities to the Local Area

a. NAS Oceana SAR maintains a continuous alert primarily for NAS Oceana aircraft and other local naval assets. Per references (a) and (b), NAS Oceana SAR will respond to the maximum extent possible to other requests for assistance from authoritative sources (see paragraph 105c) on a not-to-interfere basis.

b. The area of response for NAS Oceana SAR is not defined by a specific geographic area, but is limited only by aircraft range, refueling sites, weather and other various logistic constraints.

101. Coordination and Relationship to Other Agencies.

NAS Oceana SAR will accept tasking from U.S. Coast Guard District FIVE (CGD5), Rescue Coordination Center (RCC) Norfolk; Air Force Rescue Coordination Center (AFRCC), Langley Air Force Base (AFB) and Naval Medical Center Portsmouth per paragraph 100a. Tasking requests are normally received via telephone through Flight Support or the Air Operations Duty Desk.

102. Frequency Plan. SAR Base frequency (157.2 Mhz) is the primary coordination frequency between the SAR Mission Coordinator and the On-Scene Commander for locally tasked missions. For searches conducted at the request of another agency, that agency will designate the frequency to be used. If necessary, communications will be over landline via base operations.

103. Alert Times/Duty Watch

a. Whenever NAS Oceana is open, and provided manning levels are sufficient, the SAR crew shall maintain an alert status as follows:

(1) Thirty-minute alert from 0800 to 1600, Monday through Friday.

(2) Sixty-minute alert from 1600 to 0800, Monday through Friday, and during weekend and holiday periods.

(3) Thirty-minute alert during primary SAR status.

b. Thirty-minute alert is defined as aircraft spotted, preflighted, blades spread, system checks complete and starting power readily available; flight crew briefed at a known location

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with working pagers and sufficient maintenance personnel standing by to be able to launch within 30 minutes.

c. Sixty-minute alert is defined as aircraft preflighted, system checks complete (including weekends and holidays); flight crews have working pagers and maintenance duty personnel at recalls to be able to launch within 60 minutes.

d. Primary SAR status is defined as anytime Coast Guard helicopters are unavailable due to maintenance or a mission outside of their area and Navy flight operations are in progress.

e. Manning level sufficiency shall be determined by the Flight Support Officer and the Air Operations Officer.

f. Per reference (c), flight crews should not be given duties which may not allow them to meet minimum crew rest criteria. Crew rest is defined as ten hours of uninterrupted rest between work departure time and brief time. It is the responsibility of the aircrew to ensure work schedules are adjusted accordingly to meet crew rest requirements. Personnel shall not be assigned watches during their SAR duty day that would interfere with their SAR duties.

g. Flight crew pagers will be checked at 0745 each morning when the Air Operations AODO conducts a pager check.

104. SAR Aircraft

a. Anytime NAS Oceana SAR becomes non-SAR capable, Maintenance Control shall notify the Operations Duty Desk, SAR Helicopter Aircraft Commander (HAC) and SAR Officer. The SAR Officer will notify CGD5, determine if a message needs to be sent and brief the Operations Officer accordingly.

b. Each aircraft will be equipped with its minimum complement of SAR gear for all launches.

c. Each helicopter has its own navigational bag (NAVBAG) which should be kept in that aircraft. Charts and publications should not be exchanged between aircraft. The NAVBAG should be a preflight item. Responsibility for maintaining and updating the NAVBAG's publications lies with the Flight Support Officer.

d. On any mission which employs the duty SAR aircraft, a SAR capable crew (crew chief, swimmer, and SAR corpsman) shall be used to the maximum extent possible. The HAC may deviate from this requirement, but due consideration must be given to maintaining SAR capability.

e. The duty SAR aircraft shall be kept continuously ready for flight. If a panel is opened, it should be closed as soon as that preflight/maintenance action is complete, with the exception of the starboard transmission door. After the preflight has been completed, the aircraft is essentially sealed. Minor maintenance may be performed as long as it does not prevent the aircraft from launching within its alert time and the HAC has been informed of the intended work.

105. SAR Flights

a. In the event of a SAR rollout during normal working hours, the SAR Officer or a SAR Pilot should report to Flight Support to assist in the SAR effort.

b. In all rollouts after normal working hours, the AODO shall activate all crew beepers (HAC first) and the AOMD duty section leader beeper. The AODO should attempt to contact the SAR Officer at his/her recall.

c. Any reliable, authoritative source may provide a valid notice for the Aircraft Commander to launch the primary alert aircraft. Normal alert notifications are given to Base Operations as follows [RCC should be back briefed in all cases except (1)]:

(1) Landline notification from RCC Portsmouth and CGD5.

(2) Landline notification from Fleet Area Control and Surveillance Facility, Virginia Capes (FACSFAC VACAPES).

(3) Landline notification from AFRCC, Langley AFB.

(4) NAS Oceana Crash Network - For the announcement of aircraft inflight emergencies with intentions of landing at NAS Oceana.

(5) UHF, VHF or Marine Band FM Radio Guard Monitor.

(6) Normal Landline Telephone - From any reliable, authoritative source. (Examples: Commander in Chief, U.S. Atlantic Fleet, local law enforcement, park service, etc.).

d. NAS Oceana helicopters should not go beyond 50 nautical miles (NM) from land unescorted, unless they can maintain a communication link. Distances beyond 100 NM at sea are not recommended. The HAC shall give due consideration to crew qualifications, weather, availability of SAR services, navigational aids, fuel, HIFR availability, landing platforms and necessity for the flight prior to making the decision to launch.

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e. Final determination to launch on any SAR/Medical Evacuation (MEDEVAC) mission shall be made by the HAC.

f. A standby SAR crew may be assigned, in addition to the duty SAR crew, if a long term search is anticipated. The standby crew will normally be the next SAR crew on the watchbill.

g. In the event that the SAR aircraft must leave the local area (50 NM radius of NAS Oceana, excluding Navy Dare Target Range), CGD5 should be notified.

106. Pagers

a. Pagers are located in Maintenance Control. The SAR crew shall carry an operating and tested pager whenever they leave the immediate Air Operations/hangar area. The off-going duty crew should return their beepers, as soon as practical, the day following their duty.

b. The pagers will display a numeric code which will be used to indicate the number to call and/or the nature of the call per the following codes:

- (1) 0000 - Test
- (2) 1111 - SAR rollout
- (3) 2222 - MEDEVAC
- (4) 3333 - Call displayed number
- (5) 4444 - Cancel previous recall
- (6) 5555 - SAR/MEDEVAC drill

107. Rescue Reports. The co-pilot is responsible for completion of the SAR rescue report. The HAC shall ensure that the rescue report is submitted to the SAR Officer within three working days of the flight. A report must be prepared for all flights launched with the intention of performing rescues, searches or MEDEVACS. After review, the SAR Officer will forward the report to the SAR Model Manager, Helicopter Combat Support Squadron THREE and others concerned no later than seven days after the SAR effort.

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CHAPTER II

MISSIONS

200. Types of Missions

a. The NAS Oceana SAR helicopters provide a wide variety of services that can be grouped under three principal mission areas: SAR, logistic support and administrative transport. These services are provided to numerous activities in Hampton Roads including, but not limited to, NAS Oceana, tenant commands/staffs, operational support agencies (FACSFAC VACAPES, etc.), Naval Medical Center Portsmouth, Sea Air and Land (SEAL) teams, Explosive Ordnance Disposal (EOD) teams and assorted fleet units operating in the area.

b. Many of the support missions are executed without specific written tasking, as they are considered valid use of the unit's assets under one or more of the principal mission areas given below:

- (1) Emergency MEDEVAC.
- (2) High priority cargo/personnel transfers.
- (3) Flag Officer movements.
- (4) Parachute drops.
- (5) SEAL/EOD team operations.
- (6) Civilian disaster relief, per reference (d).
- (7) Navy Dare County support (Air Operations Department mission responsibilities).
- (8) Tactical Air Combat Training System range support.
- (9) Emergency contingency operations.

Other tasking should be referred to Commander, Naval Air Force, U.S. Atlantic Fleet (COMNAVAIRLANT) for approval.

201. Passengers

a. A passenger is anyone not assigned as a crewman for that specific flight. All crewmen shall be listed as such on the yellow sheet. Aviation personnel embarked for accumulation of flight time must be listed as crewmembers.

b. Carrying passengers during day or night over-land flights are authorized at the HAC's discretion, as long as they do not impede the mission.

c. Passengers shall not be carried on flights conducting simulated over-water emergencies, and on over-water night flights, unless operationally necessary per reference (e) and at the discretion of the HAC.

d. It is the first crewman's duty to ensure all passengers are briefed and provided appropriate survival gear.

202. Paradrops

a. Shall be conducted in Visual Flight Rules. Parachutists shall not be allowed to descend through a cloud, regardless of the altitude.

b. All jumpers and crewmen shall be seated with seat belts fastened for all takeoffs and landings. Paradrop personnel shall remain strapped in until cleared by the HAC through the crewchief.

c. All paradrops shall be made under the positive control of the appropriate Air Traffic Control facility.

d. Brief minimum bailout altitude to be used in the event of an emergency.

e. Per reference (f), the organization requesting flight services is responsible for arranging Notices to Airman and a fire truck at the helicopter landing zone.

203. Inland SAR

a. Due to the local area terrain, which includes many densely forested as well as mountainous areas, NAS Oceana SAR will maintain an inland SAR program.

b. Per reference (g), there are five basic rescue methods which can be used:

- (1) Landing to effect a rescue.
- (2) Rescue via one skid/wheel.
- (3) Rescue via hoist.
- (4) Rappelling.
- (5) Short-haul evolution.

c. The preferred rescue method in all over-land cases is to land. The least preferred is rescue via one skid/wheel and should not be used by NAS Oceana SAR aircraft.

d. Rappelling operations shall be conducted only by a rappel-qualified crew. To be considered qualified, the crew must consist of the following (minimum requirements):

(1) A first crewman who is Helicopter Inland Rescue Aircrewman (HIRA) qualified and current per reference (g), as well as qualified in the operation of the rappel station. If a HIRA qualified first crewman is not available, a HIRA qualified utility crewman must accompany the flight. He/she shall also have been evaluated in that position by the command's Rappel Standardization Petty Officer.

(2) A crewman or corpsman who is HIRA qualified and current.

(3) At least one pilot who has previously conducted rappel operations.

e. All rappelling, short-haul and confined area landing (CAL) operations shall be conducted per paragraph 304 of this instruction.

300. Training Schedule. Pilot training is conducted weekly. Aircrew training is conducted weekly, which includes classroom training, pool training and physical training.

301. Flight Syllabus

a. All pilots under instruction will keep Flight Support aware of their progress.

b. All aircrewmembers will complete the local training syllabus for H-3 aircrew/plane captain.

302. Cross-Country Flights

a. Cross-country flight requests should be submitted to Flight Support five working days prior to the proposed date of departure.

b. The requesting pilot shall provide his/her own crew.

2. Action. Change Chapter III, paragraph 303 to read as follows:

"303. Proficiency Requirements. In addition to proficiency requirements found in references (c) and (f), pilots and aircrew should comply with the following:

a. If a pilot has not flown for a period exceeding 15 days, but less than 30 days, he/she should fly at least a 1.0 hour daytime flight, including pattern work, before being scheduled for night flying.

b. If a pilot has not flown for more than 30 days, upon return he/she should first fly a daytime flight with a current HAC.

c. Pilots and aircrew should log a day familiarization flight every 30 days.

d. Pilots and aircrew should log 1.0 hours of nighttime and a night familiarization flight every 30 days.

e. Pilots and aircrew shall meet the minimum SAR training requirements per references (e) and (g).

f. Pilots should fly three night-coupled approaches every 60 days.

g. During rappel short-haul evolutions, non-aeronautically designated personnel shall not be used, unless approved by the SAR or Operations Officer.

h. Pilots should conduct at least one rappel training flight per month.

j. All HIRA qualified crewmembers shall maintain their currency per reference (e)."

304. Confined Area Landing/Rappel Program

a. Confined Area Landings (CALs)

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(1) When evaluating a landing site, execute as many flybys as necessary. **At least one high pass and one low pass shall be made.**

(2) Continuously check wind direction and estimate velocity.

(3) Plan approach so that waveoff can be made into the wind with minimal requirement to climb.

(4) Evaluate obstacles in the landing site and consider possible null areas and routes of departure.

NOTE: The six major considerations of a CAL site are height of obstacles, size and topography of landing zone, surface composition, loss of wind effect, power required/power available and departure route.

(5) Determine ability to hover out of ground effect (HOGE) prior to attempting a landing. Torque should not exceed 86 percent during HOGE conditions.

(6) Landing site selection should not be based solely on convenience but consideration should be given to all relevant factors.

(7) Pilot not at controls must perform all collateral cockpit functions, monitor gauges, and navigate.

(8) Aircrewmembers shall position themselves for the CAL and evaluate the landing area.

(9) While keeping the pilot at controls (PAC) informed at all times, the Crew Chief and Second Crewman shall call the aircraft into the zone using the precise voice commands as written in this SOP.

(10) Ensure landing checklist is complete.

b. Confined Area Landing Communications

(1) After the crew has evaluated the landing zone, but prior to final approach, the right-side crewman shall report, **"Ready on the right,"** followed immediately by the left-side crewman reporting, **"Ready on the left."** The Crew Chief then reports, **"Set aft for confined area landing."** On final approach, the Crew Chief shall start calling distance to the landing zone (LZ). Once the aircraft is positioned directly over the LZ, the right-side crewman reports, **"Clear right, tail clear,"** followed immediately by the left-side crewman reporting, **"Clear left, tail clear."**

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(2) Should the aircraft need to be repositioned at any time during the evolution, determine distance and direction on move and proceed with the following voice commands, "Clear (direction of move), easy (number) feet." These voice commands will be given every 3 to 5 seconds until over the desired location, then the command "Steady" is given.

(3) At this time a quick zone description is given to the PAC. The zone will be described first by the right-side crewman starting FWD (12 o'clock position), identifying the position and distance of the nearest obstacle and any other important factors. The crewman finishes his description by reporting, "Clear right, tail clear." The crewman on the left will then conduct his zone inspection starting AFT (6 o'clock position) around to the FWD (12 o'clock position), identifying the position and distance of the nearest obstacle and any other important factors. The crewman will finish his description by reporting, "Clear left, tail clear."

(4) Once the aircraft has been cleared for landing, the crewman shall make the following calls:

Right-side crewman: "Easy down (number) feet" every 3-5 seconds.
"Clear right, tail clear"

Left-side crewman: "Clear left, tail clear"

**** NOTE: The PAC will not initiate a move until he receives clearance from the Crew Chief and the Second Crewman.**

(5) When the aircraft is 3 to 5 feet off the deck the Crew Chief shall describe the slope off the ground (calling the high side of the slope first), left to right, or right to left, and giving the number of degrees of the slope. The slope degree can be determined by approximating the distance of the main landing gear to the deck. One inch of difference in main landing gear (MLG) height equals approximately one degree of slope. If no slope gradient is apparent, the Crew Chief will report, "No apparent slope," and call the aircraft to the deck. As the MLG begins to touch down the crewmen reports, "Light on the right/left" (as applicable). When both MLG are on deck, the Crew Chief shall check under the aircraft for clearance and stable ground and report, "Clear to roll off power."

(6) Prior to take-off, the pilots should recompute power required to HOGE due to the additional weight of the survivors. When departing from the landing zone, the same terminology will be used as for the landing. Once the aircraft is clear of all obstacles, the Crew Chief shall report the following, "Clear right, tail clear," second crewman, "Clear left, tail clear," and Crew Chief, "Clear for forward flight."

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c. Required Equipment for Rappel

- (1) Rappel rope (150 or 250 ft.)
- (2) Rescue knife (v-blade)
- (3) Tubular nylon webbing
- (4) Sky Genie descent device
- (5) Rappel harness aircraft
- (6) Carabiners
- (7) Belay rope and belay plate
- (8) Three gunners belts
- (9) Rappel gloves
- (10) Radio

d. Additional equipment required for training evolution

- (1) Litter
- (2) Oxygen and Level "B" (with Corpsman on board)
- (3) Level A medical bag

e. Aircraft/Equipment Inspection and Documentation

(1) The Crew Chief/HIRA shall ensure that all equipment has a pre/post flight inspection.

(2) Aircraft hardware (hook-up points) shall be preflighted for corrosion and security.

(3) Rappel rope pre/post flight inspections and number of rappels shall be documented on the Rappel Record Card.

(4) Pre/post flight inspections shall be documented on the Aircraft Bag.

**** NOTE: All deck setups should be tied prior to preflight to allow for proper inspection of all equipment and hook-up points by the Crew Chief/HIRA crewman.**

f. Aircraft shall be rigged utilizing the procedures described in Appendix D.

g. Rappel/Short Haul Communications

**** NOTE:** Bold-faced quotes/signals are the standardized voice commands/signals. No other phraseology/hand signals are acceptable. Required pilot responses are given below. Beyond that, "Roger" may be used to acknowledge all other voice commands/signals.

**** NOTE:** During rappel/belay evolutions, the PAC and the crewman running the rappel station shall monitor Intercom Communications System (ICS) only.

(1) Rappel voice procedures:

Crew Chief: **"Rappeller hooking up, performing initial check."** - Rappeller is approaching the cargo door and attaches the descent control device to the rappel harness with a double lockoff.

Crew Chief: **"Initial check complete."** - After completing initial check per reference (b).

Crew Chief: **"Permission to put rappeller out the door?"**

Pilot: **"Granted/Denied"** - Tap rappeller one time on the chest to release gunners belt and position rappeller in the doorway.

Crew Chief: **"Commencing final check."** - Rappeller stands outside cargo door, Crew Chief attaches any additional gear (litter/belay line) and completes final check per reference (b).

Crew Chief: **"Final check complete, permission to deploy rope?"**

Pilot: **"Deploy rope."**

Crew Chief: **"Rope away."**

Crew Chief: **"I have a clean rope/fouled rope."** - Roper is not knotted/is knotted.

Crew Chief: **"Permission to rappel?"**

Pilot: **"Rappel"** - Clear to rappel/ **"Negative, stand by."**

Crew Chief: **"Rappeller away."** - Tap rappeller three times on the shoulder. The Crew Chief shall continuously monitor the rappeller and keep PAC informed of aircraft clearance and rappeller status.

Crew Chief: **"Rappeller on deck."**

Rappeller: **I AM OK** signal (arm raised palm up).
Crew Chief: **"Rappeller OK."**
Crew Chief: **"Rappeller disconnecting."**
Crew Chief: **"Rappeller is clear."** - After rappeller holds bail and shaft of sky genie overhead.
Crew Chief: **"Disconnecting rope."** - After last rappeller is disconnected from the rope.
Crew Chief: **"Ropes away, clear of all ropes and lines, clear for forward flight."** - After Crew Chief drops the rope and ensures all lines are clear of the aircraft.

**** NOTE: The aircraft position shall be checked to ensure it is clear of all obstacles before clearing for forward flight.**

**** NOTE: During rappel evolutions, the last rappeller shall remain on ICS until he/she is ready to rappel and will provide the Crew Chief assistance with aircraft clearances.**

(2) Short-haul voice procedures:

Rappeller: **I AM OK** signal. - After reaching the ground and performing a modified lock-off.
Crew Chief: **"In belay/out belay/hold belay."** - Use as applicable.
Rappeller: **READY FOR PICK UP** signal. - Thumbs up.
Crew Chief: **"I have a pick up signal."** - Crew Chief notifies the pilot that rappeller is ready for pick up.
Rappeller: **CLEAR TO ASCEND** signal. - Arms straight out at shoulder height, waving upward.
Crew Chief: **"Easy up."** - Direct the aircraft up while maintaining adequate clearance from all obstacles. Repeat every 3-5 seconds until the rappeller gives the **CLEARED FOR FORWARD FLIGHT** signal.
Crew Chief: **"Rappeller/Survivor clear of deck."**
Rappeller: **LEVEL OFF** signal. - Arms straight out from shoulders making twisting movement from side to side.
Crew Chief: **"Level off."**
Pilot: At this point note hard-deck altitude.

Rappeller: **CLEARED FOR FORWARD FLIGHT** signal. - Moves arm in circular motion overhead, then extend in desired departure direction. Indicates clear of all obstructions and ready for forward flight.

Crew Chief: **"Cleared for forward flight."** - Crew Chief will call out the predetermined zone in clock position and distance in yards.

Crew Chief: **"Safety belay."** - Grasp free end of the belay line approximately 10 inches from the belay plate. Route rope through the locking carabiners attached to the setup. Pull rope taut and hold firmly.

Rappeller: **CLEAR TO DESCEND** signal. - Arms straight out to the side waving downward.

Crew Chief: **"Easy Down."** - Every 3-5 seconds until rappeller is on the deck.

Crew chief: **"Rappeller is on the deck."**

Rappeller: **I AM OK** signal. - Gives when on deck with survivor and both are okay.

Crew Chief: **"Rappeller ok."**

Rappeller: Holds bail and shaft of sky genie overhead, indicating rappeller and survivor are disconnected.

Crew Chief: **"Rappeller and survivor clear, disconnecting rope."** - Crew Chief disconnects rappel rope.

Crew Chief: **"Ropes away."** - Drops rappel rope clear of helicopter.

Crew Chief: **"Clear of all ropes and lines, clear for forward flight."** - After belay line has been retrieved.

**** CAUTION: During short haul evolutions, aircraft shall not exceed 40 knots, per reference (b) .**

**** NOTE: The belay line shall be used on all live hoist training evolutions above 10 feet AGL.**

h. Tower operations. During the tower rappel crew brief, a qualified HIRA crewman shall ensure the following items are briefed:

- (1) Tower rappel procedures
- (2) Weather

- (3) Minimum crew
- (4) Required equipment
- (5) Equipment inspection and documentation
- (6) Communications: Verbal/Non-verbal
- (7) Emergency procedures
- (8) Mishap plan

**** NOTE: Safety helmets shall be worn by the ground safety observer and all personnel in the operating area. Rappellers shall wear a safety helmet or flight helmet. Personnel shall not loiter in the training area.**

i. Rappel operations shall not be conducted during Thunderstorm Condition I, or in moderate to heavy precipitation.

j. During tower operations, one HIRA-qualified Crew Chief or corpsman is needed to act as tower safety observer. Also, one HIRA-qualified crewman is needed to tend the line and act as the ground safety observer.

k. Equipment required to rappel from tower:

- (1) Rappel rope (150 ft or 250 ft)
- (2) Chaff pad
- (3) Rappel gloves
- (4) Gunners belts (three minimum)
- (5) Tubular nylon webbing (two 6 ft)
- (6) Sky Genie descent device
- (7) Rappel harness
- (8) Carabiners
- (9) Helmets
- (10) Cell phone or hand-held radio (for emergency communications)
- (11) Level A medical bag

1. The HIRA crewman in charge of the evolution shall ensure that all equipment has a pre/post inspection and shall document the inspection on the proper card.

m. It is imperative that the ground safety observer tending the line for tower operations maintain a handhold on the rope at all times. If the rappeller is unable to slow or stop his/her descent, the ground safety observer must be ready to immediately pull tension on the rope. This will automatically stop the descent. If at any time the safety of a crewman is in question, the training evolution shall stop immediately. The situation shall be corrected and thoroughly debriefed before training commences.

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CHAPTER IV

MISCELLANEOUS

400. Minimum Fuel Requirements. When a standby crew and helicopter are unavailable, minimum fuel for routine training missions should not be allowed to go below 2,000 pounds. In missions where fuel levels are expected to go below 2,000 pounds, consideration should be given to notifying CGD5.

401. Cold Weather Operations. The HAC shall ensure that anti-exposure suits are worn by all crewmembers per reference (b) and when water temperature is less than 50°F.

402. Hot Crew Switches. Hot crew switches may be conducted with rotors engaged or disengaged. One on-coming pilot shall go directly to the cockpit, strap in and receive a brief on the aircraft's status from the off-going pilot. The other on-coming pilot shall make an external inspection of the helicopter. The departing pilot shall place his/her seat all the way down and back and remain on ICS, hot mic selected until clear of the cockpit. Pilot at the controls shall monitor speed selectors and manual throttles during the crew switch. The incoming pilot shall plug into the ICS prior to entering the cockpit.

403. Deck Landing Qualifications (DLQs). Initial qualification in the H-3 will be flown only with a pilot previously DLQ qualified and current in the H-3. All initial qualifications and requalifications should be flown from the right seat using a starboard-to-port approach, but may be flown from the left seat if qualifying on a up-the-stern approach type vessel. Parking brakes should be reset prior to each landing.

404. Night Flights. Pilots should fly a minimum of three night-coupled approaches every 60 days to maintain their night SAR proficiency. If a pilot has not flown three night-coupled approaches within 60 days, they should fly three night-coupled approaches with a current pilot prior to standing night SAR duty.

405. Rappel

a. Practice live hoisting shall be done over the water or at no more than 10 feet above a hard surface unless safety belay line procedures listed in reference (b) are utilized. Practice live hoists shall not be done using the rescue hoist manual override valve.

b. During rappel short-haul evolutions, aircraft altitude shall be a minimum of 75 feet greater than the altitude at which

the rappeller cleared the deck until stabilized in a hover and lowering the rappeller back down. Aircraft air speed should not exceed 40 knots during the short-haul.

c. During rappels, the length of rope used shall exceed the briefed aircraft altitude by 25 feet.

d. Practice rappels/CALs should only be conducted within the field boundaries of NAS Oceana, Naval Auxiliary Landing Field Fentress, Felker Army Airfield or approved CAL/rappel practice zones.

406. Plane Captain Procedures

a. During engine start, the plane captain will be positioned just outside the rotor arc between the ten and two o'clock positions. A qualified fireguard shall be stationed with a fire bottle just outside the rotor arc, between the nine and ten or two and three o'clock positions. During taxi, the plane captain shall position himself/herself per reference (c).

b. Light/hand signals will be as follows:

<u>CONDITION</u>	<u>DAY</u>	<u>NIGHT</u>
#1 engine start	Aft anti-collision on One finger, circular	Same Flashlight, circular
Blades spread	Arms spread	Rotor headlight on
#2 engine start	Two fingers, circular	Flashlight, circular
Ready to engage	Thumb up, circular Position lights flashing bright	Position lights flashing dim
Cyclic check complete	Thumbs up	Rotor headlight off
NOTE: Personnel shall not enter the rotor arc until cleared by the plane captain. The plane captain shall not clear them into the rotor arc until the cyclic check is complete.		
Ready to taxi	Thumbs up. Position lights steady bright	Position lights steady dim
Prior to takeoff	Forward rotator on Aft beacon on	Forward rotator on
After landing	Forward rotator off Aft beacon to aft rotator	Forward rotator off

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Disengage	Fist extended, thumb pointing inwards Position lights flashing bright	Position lights flashing dim
Blade fold	Arms crossed	Arms crossed
Engine shutdown	Cut to throat	Cut to throat with flashlight

407. Flight Suits. Flight suits are an authorized uniform at any time while standing SAR alert. Standard flight suits shall be worn if going off the flight line or base. Standard flight suit configuration is considered an Air Operations name tag over the left breast, NAS Oceana patch over the right breast and a small U.S. flag on left shoulder. An optional patch may be worn on the right sleeve at the shoulder, such as a NAS Oceana SAR patch, wet-swimmer or corpsman patch.

APPENDIX A

PHONE NUMBERS/FREQUENCIES

<u>COMMAND</u>	<u>FREQUENCY</u>	<u>PHONE</u>
SAR BASE	VHF 157.2	433-3376/3377
NAS OCEANA BASE OPERATIONS	UHF 284.9	433-2162
NORFOLK RESCUE/ COAST GUARD DISTRICT 5		398-6231
COAST GUARD GROUP HAMPTON ROADS	UHF 282.8/ FM CH 16	483-8567
ELIZABETH CITY COAST GUARD		(919) 335-6184 DSN 935-1520
AIR FORCE RCC LANGLEY AFB		764-8112
NAVAL MEDICAL CENTER PORTSMOUTH	UHF 284.9/ VHF 40.5	
MEDEVAC OFFICE		953-1365
DISPATCH OFFICE		953-7283/5064
NATIONAL NAVAL MEDICAL CENTER BETHESDA	UHF 255.4/ VHF 122.2	(301) 295-4611 DSN 295-4611
WALTER REED ARMY MEDICAL CENTER		(202) 782-6141 (202) 782-7511
NORFOLK SHERIFF		441-2341
VIRGINIA BEACH SHERIFF		427-4555
COMHELTACWINGLANT		444-1846
COMAEWWINGLANT		444-1153
COMFITWINGLANT		433-4007
COMSTRKFIGHTWINGLANT		433-9141

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APPENDIX B

SAR BRIEFING

THE FOLLOWING SHOULD BE USED BY ALL SAR PARTICIPANTS AT NAS OCEANA AS A CONVENIENT SINGLE SOURCE METHOD OF GATHERING PERTINENT SAR INFORMATION DURING THE INITIAL PHASE OF SAR OPERATIONS. COPIES OF THIS BRIEFING WILL BE OBTAINED FROM THE AIR OPERATIONS DUTY OFFICER BY THE INCIDENT HAC FOR SUBMISSION OF RESCUE REPORTS.

1. TIME: _____ DATE: _____

2. NAME OF CALLER AND PHONE NUMBER: _____

3. ADDRESS OF CALLER: _____

4. SEARCH OBJECTIVE: _____

5. MISHAP LOCATION. (LATITUDE/LONGITUDE, MAPS, ROADS, LANDMARKS, TACTICAL AIR NAVIGATION (TACAN) CUT, ETC.). _____

6. ON-SCENE COMMANDER: (WHO, TYPE AIRCRAFT/VESSEL, CALL SIGN) _____

7. SAR OPERATING FREQ. (CIRCLE ONE): 284.9 282.8 OR _____

8. AODO - CALL/PAGE SAR AIRCRAFT COMMANDER. IF UNABLE TO CONTACT THE AIRCRAFT COMMANDER, CONTACT THE CO-PILOT.

9. SAR CREW ALERTED (TIME): _____ LAUNCHED: _____
ON-SCENE: _____

(PAGE ALL AND/OR CALL)

HAC: _____ SEE RECALL LIST

ARRIVED: _____

CO-PILOT: _____ SEE RECALL LIST

ARRIVED: _____

CREWCHIEF: _____ SEE RECALL LIST

ARRIVED: _____

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WET CREWMAN: _____ SEE RECALL LIST

ARRIVED: _____

DUTY CORPSMAN: _____ SEE RECALL LIST

ARRIVED: _____

10. MAINTENANCE - 433-2813/2814/3354 TO PULL OUT AIRCRAFT AT NIGHT OR READY A STANDBY AIRCRAFT DURING DAY.

11. SAR WEATHER BRIEF FILLED OUT.

12. NOTIFY SAR OFFICER (SEE RECALL).

13. NOTIFY QUARTERDECK AT 433-2366/2367.

14. NORFOLK SAR NOTIFIED - 398-6231.

15. IF REQUESTED BY SAR OFFICER, CALL COMNAVIAIRLANT PUBLIC AFFAIRS OFFICER AT 444-3373/4.

16. ADDITIONAL NOTES: _____

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APPENDIX C

QUARTERLY SAR FLIGHT KNEEBOARD CARD

SAR TRAINING FLIGHT REQUIREMENTS

EACH ITEM MUST BE COMPLETED BY EACH PILOT LOGGING A QUARTERLY SAR
TRAINING FLIGHT

1. SAR BRIEF

- a. EW COORDINATION/RESPONSIBILITIES
- b. COMMUNICATIONS
- c. MISSION BRIEF
- d. SCANNING PROCEDURES
- e. EMERGENCY PROCEDURES

2. LOCAL AREA FAMILIARIZATION (INTENDED TO BE FLOWN,
BUT MAY BE BRIEFED IF COURSE RULES, OPERATIONAL CONSTRAINTS OR
WEATHER PRECLUDES OPERATION.)

- a. COURSE RULES
- b. HOSPITAL PAD RECOGNITION
- c. LANDING ZONE EVALUATION

3. SEARCH PATTERNS

4. HELICOPTER APPROACHES

- a. DAY/NIGHT DOPPLER AND DAY VFR RESCUE APPROACHES
- b. NIGHT LOW VISIBILITY RAFT DEPLOYMENT PATTERN

5. SWIMMER/CREW DEPLOYMENT/RECOVERY

- a. 10/10, 15/0
- b. HOISTING
- c. CONFINED AREA LANDINGS
- d. ONE SKID PICK-UPS
- e. RAPPELING

6. OSC DUTIES

- a. ORGANIZATION/USE OF CHECKLISTS
- b. VOICE PROCEDURES
- c. TRAFFIC CONTROL
- d. TIME/ASSET MANAGEMENT

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APPENDIX D

AIRCRAFT RIGGING PROCEDURES FOR RAPPEL

- (1) **Hoist Rig** - Tie two 12' flat ropes with Waterman's knots and route through the chaff pad. Wrap chaff pad around all hoist stanchions against the hoist cowling with outer flap facing aft. Attach a carabiner to each flat rope. (See Fig 1.)

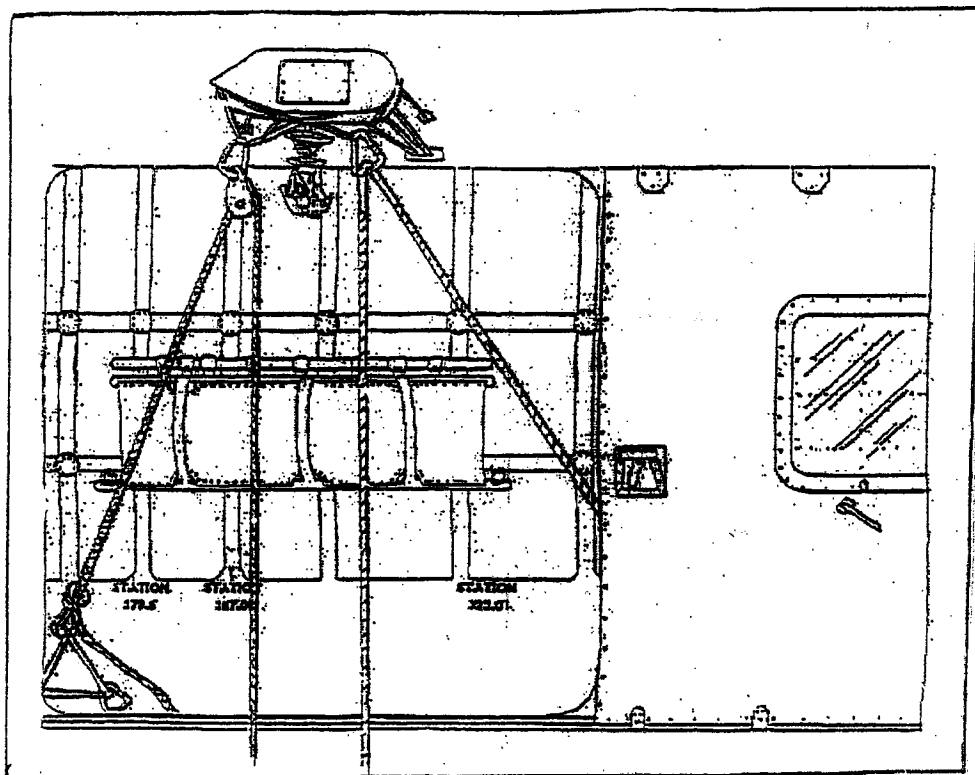


Fig.1

- (2) **Rappel Station** - Tie a self-equalizing deck setup with a 12' flat rope and attach it to the deck tie-down rings at airframe stations 292 BLO, 300 BL 18R, and 318 BL 0. The rappel rope is attached to the self-equalizing deck setup \via a carabiner\.. The rappel rope exits the aircraft through the cargo door and attaches to the fwd carabiner on the hoist rig. (See Fig 2 and Fig 3.)
- (3) **Belay Station** - Tie a self-equalizing deck setup with a 12' flat rope and attach it to the deck tie-down rings at airframe stations 370 BL 10R, 393 BL 10R, 393 BL 30R. The belay line is attached to the self-equalizing deck setup \via two carabiners with opposing gates and belay plate\.. The rope exits the aircraft through the cargo door and attaches to the aft carabiner on the hoist rig. The belay line anchor point is attached to the hard mount at station 367. (See Fig 2 and Fig 3.)

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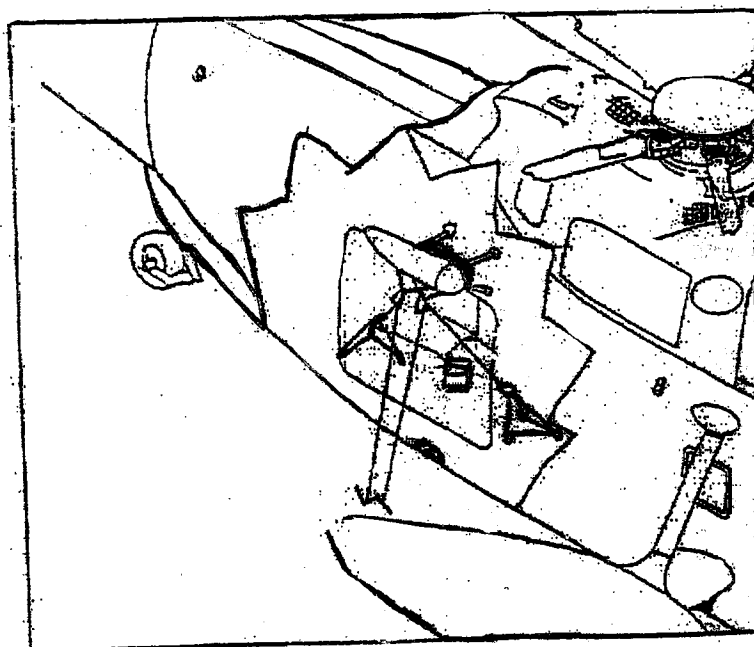


Fig. 2

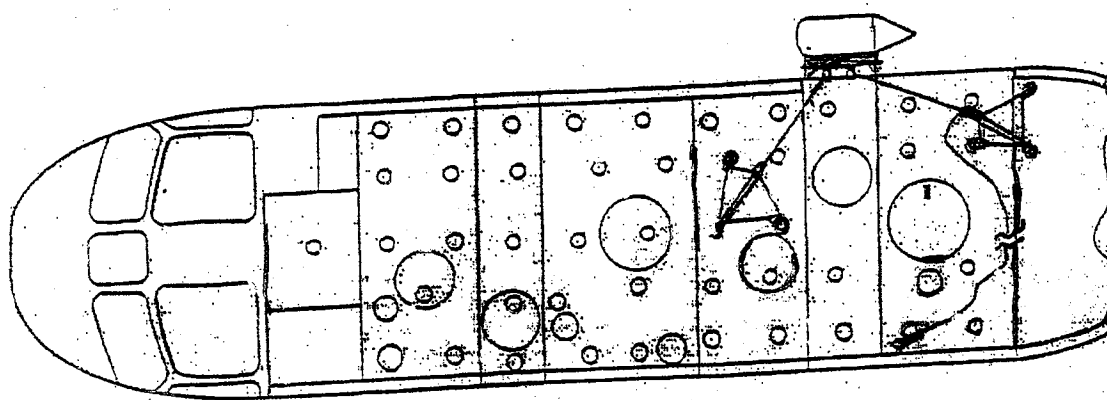


Fig. 3